Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-118. (canceled)

119. (new): A method for administration of a substance to the intradermal space of a mammal, the method comprising injecting the substance into the intradermal space of the mammal through at least one hollow needle comprising an needle outlet at a depth of about 0.3 mm to about 2.5 mm, wherein the outlet has an exposed height from 0 mm to about 1 mm, and wherein improved systemic absorption is produced relative to absorption produced upon injecting the substance subcutaneously.

120. (new): The method of claim 119, wherein the substance is administered as a bolus.

121. (new): The method of claim 119, wherein the substance is administered by infusion.

122. (new): The method of claim 119, wherein the substance comprises a monoclonal antibody.

123. (new): The method of claim 119, wherein the substance comprises a pegylated antibody.

124. (new): The method of claim 119, wherein the substance comprises insulin.

125. (new): The method of claim 119, wherein the substance comprises a vaccine.

126. (new): The method of claim 125 wherein the substance further comprises a carrier or adjuvant.

127. (new): The method of claim 119, wherein the substance is in the form of nanoparticles.

128. (new): The method of claim 119, wherein the at least one hollow needle comprises an array of microneedles.

129. (new): The method of claim 119, wherein the exposed height of the needle outlet is 0 mm.

130. (new): The method of claim 119, wherein the needle outlet is formed by a bevel.

131. (new): The method of claim 119, wherein the needle outlet is formed by an opening in the side of the needle.

132. (new): A method for administration of a drug to a human subject, comprising delivering the drug through the lumen of a hollow needle into an intradermal compartment of the human subject's skin, which method comprises

(a) inserting the needle into the subject's skin so that the needle penetrates the intradermal compartment, and the needle's outlet depth and exposed height of the outlet are located within the intradermal compartment, wherein the outlet has an exposed height of about 0 to 1 mm; and

(b) delivering the drug through the lumen of the needle with the application of pressure in an amount effective to control the rate of delivery of the drug,

so that the drug is delivered through the lumen of the needle into the intradermal compartment and distributed systemically exhibiting a higher maximum plasma concentration and a higher bioavailability as compared to subcutaneous delivery of the drug.

133. (new): The method of claim 132, wherein the needle is selected from the group consisting of microneedles, catheter needles, and injection needles.

134. (new): The method of claim 132, wherein a single needle is inserted.

135. (new): The method of claim 132, wherein multiple needles are inserted.

136. (new): The method of claim 132, wherein the substance is a liquid delivered by pressure directly on the liquid.

137. (new): The method of claim 132, wherein a hormone is delivered.

138. (new): The method of claim 137, wherein the hormone is insulin or PTH.

139. (new): The method of claim 132, wherein the needle has a length from about 0.5 to about 1.7 mm.

140. (new): The method of claim 132, wherein the needle's outlet depth is between about 0.3 mm to 2 mm when the needle is inserted.

141. (new): The method of claim 132, wherein the outlet has an exposed height of 0 mm.

142. (new): The method of claim 132, wherein the delivery rate or volume is controlled by spacing of multiple needles.